

REMARKS

Claim Rejections

Claims 4-6 are rejected under 35 U.S.C. §103 as being unpatentable over Honma et al. (U.S. 4,966,158 A) in view of Arai et al. (U.S. 5,755,672 A).

Amendments to Specification

Applicant has amended the Specification as noted above to correct the font type. It is believed that the foregoing amendments to the Specification overcome the outstanding objections thereto. No "new matter" has been added to the original disclosure by the foregoing amendments to the Specification.

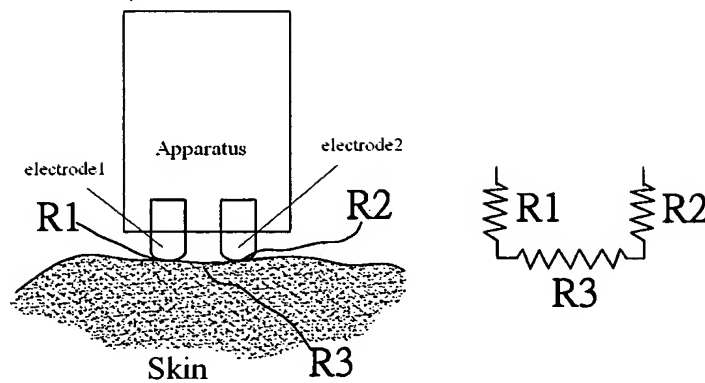
Drawings

It is noted that no Patent Drawing Review (Form PTO-948) was received with the outstanding Office Action. Thus, Applicant must assume that the drawings are acceptable as filed.

Claim Amendments

By this Amendment, Applicant has amended claims 4 and 5 of this application. It is believed that the amended claims specifically set forth each element of Applicant's invention in full compliance with 35 U.S.C. § 112, and define subject matter that is patentably distinguishable over the cited prior art, taken individually or in combination.

As shown in the figure below, according to the present invention, the water content of the skin is measured according the R1 (the contact conductive resistance between the electrode1 and skin); R2 (the contact conductive resistance between the electrode2 and skin), and R3 (the skin conductive resistance between the electrode (1) and electrode (2)) utilizing a Bioelectric Impedance Analysis (BIA) method.



1. R1 is the contact conductive resistance between the electrode1 and skin .
2. R2 is the contact conductive resistance between the electrode2 and skin .
3. R3 is the skin conductive resistance between the electrode1 and electrode2 .

If the contact area between the conductive resistance R1 (or the conductive resistance R2) and skin is bigger, the conductive resistance R1 (or the conductive resistance R2) is smaller. If a different pressure is applied to the skin for the same person, then the contact area will be different resulting in a different conductive resistance R1 (or the conductive resistance R2), and then the incorrect water content of the skin will be measured.

Therefore as stated on page 6, line 25, through page 7, line 1, it is important for the present invention that:

When the electrode 20 is pressed onto the skin to exert a force on the elastic member 21 , the limitation of the fixed base 21 can keep the same moving distance of the electrode 20 for each time, and thus having the same pressure exerted on the electrode 20 by the elastic member and the same pressure exerted on the skin by the electrode 20.

Therefore, because of this improvement the present invention will provide the same test result for tests under the same conditions.

The primary reference to Honma et al. teaches a measurement method utilizing a computer (14) and two electrodes (51, 52) connected thereto by flexible lines.

Honma et al. do not teach one of the at least two conductive electrodes is inserted into each of the at least two through holes of the fixed base from an interior of the casing and protruding from the casing; each of the at least two conductive electrodes being movable between compressed and extended positions and having a flange limiting a length of outward movement in the extended position; one of the at least two elastic members having a first end pressing outwardly against an interior of each of the at least two conductive electrodes and a second end connected to the micro alternate current generator and the alternate current resistance measuring circuit; nor do Honma et al. teach, when the electrodes engage the skin, the at least two elastic members providing a constant pressure between the skin and the at least two conductive electrodes.

The secondary reference to Arai et al. teaches an apparatus for measuring moisture content comprising: a casing (2), a fixed base having a through hole electrode (3) protruding from the casing and movable between compressed and extended positions and having a flange (11) limiting a length of outward movement in the extended position, and an elastic member or spring (15). The spring (15) is connected to switch (12), which is further connected to the measuring circuit .

Arai et al. state, column 4, lines 25-28:

an electrostatic variable capacity sensor that detects the amount of water content based on the electrostatic capacity of the sample under examination which is touched by the measurement surface may, for example, be used as water content sensor 3....

However, in Arai et al. the apparatus is only one electrostatic capacity sensor. The theory of the present invention to measure water content is based on conductive resistance R1; conductive resistance R2, and conductive resistance R3. The apparatus of the present invention requires at least two conductive electrodes.

A combination of Honma et al. and Arai et al. will not produce an apparatus having proper contact between the electrodes and the skin, and providing accurate measurements of moisture content retained in the skin.

Arai et al. do not teach one of the at least two conductive electrodes is inserted into each of the at least two through holes of the fixed base from an interior of the casing and protruding from the casing; each of the at least two conductive electrodes being movable between compressed and extended positions and having a flange limiting a length of outward movement in the extended position; one of the at least two elastic members having a first end pressing outwardly against an interior of each of the at least two conductive electrodes and a second end connected to the micro alternate current generator and the alternate current resistance measuring circuit; nor do Arai et al. teach, when the electrodes engage the skin, the at least two elastic members providing a constant pressure between the skin and the at least two conductive electrodes.

Even if the teachings of Honma et al. and Arai et al. were combined, as suggested by the Examiner, the resultant combination does not suggest: one of the at least two conductive electrodes is inserted into each of the at least two through holes of the fixed base from an interior of the casing and protruding from the casing; each of the at least two conductive electrodes being movable between compressed and extended positions and having a flange limiting a length of outward movement in the extended position; one of the at least two elastic members having a first end pressing outwardly against an interior of each of the at least two conductive electrodes and a second end connected to the micro alternate current generator and the alternate current resistance measuring circuit; nor does the combination suggest, when the electrodes engage the skin, the at least two elastic members providing a constant pressure between the skin and the at least two conductive electrodes.

It is a basic principle of U.S. patent law that it is improper to arbitrarily pick and choose prior art patents and combine selected portions of the selected patents on the basis of Applicant's disclosure to create a hypothetical combination which allegedly renders a claim obvious, unless there is some direction in the selected prior art patents to combine the selected teachings in a manner so as to negate the patentability of the claimed subject matter. This principle was enunciated over 40 years ago by the Court of Customs and Patent Appeals in In re Rothermel and Waddell, 125 USPQ 328 (CCPA 1960) wherein the court stated, at page 331:

The examiner and the board in rejecting the appealed claims did so by what appears to us to be a piecemeal reconstruction of the prior art patents in the light of appellants' disclosure. ... It is easy now to attribute to this prior art the knowledge which was first made available by appellants and then to assume that it would have been obvious to one having the ordinary skill in the art to make these suggested reconstructions. While such a reconstruction of the art may be an alluring way to rationalize a rejection of the claims, it is not the type of rejection which the statute authorizes.

The same conclusion was later reached by the Court of Appeals for the Federal Circuit in Orthopedic Equipment Company Inc. v. United States, 217 USPQ 193 (Fed.Cir. 1983). In that decision, the court stated, at page 199:

As has been previously explained, the available art shows each of the elements of the claims in suit. Armed with this information, would it then be non-obvious to this person of ordinary skill in the art to coordinate these elements in the same manner as the claims in suit? The difficulty which attaches to all honest attempts to answer this question can be attributed to the strong temptation to rely on hindsight while undertaking this evaluation. It is wrong to use the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit. Monday morning

quarterbacking is quite improper when resolving the question of non-obviousness in a court of law.

In In re Geiger, 2 USPQ2d, 1276 (Fed.Cir. 1987) the court stated, at page 1278:

We agree with appellant that the PTO has failed to establish a *prima facie* case of obviousness. Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching suggestion or incentive supporting the combination.

Applicant submits that there is not the slightest suggestion in either Honma et al. or Arai et al. that their respective teachings may be combined as suggested by the Examiner. Case law is clear that, absent any such teaching or suggestion in the prior art, such a combination cannot be made under 35 U.S.C. § 103.

Neither Honma et al. nor Arai et al. disclose, or suggest a modification of their specifically disclosed structures that would lead one having ordinary skill in the art to arrive at Applicant's claimed structure. Applicant hereby respectfully submits that no combination of the cited prior art renders obvious Applicant's amended claims.

Summary

In view of the foregoing, Applicant submits that this application is now in condition for allowance and such action is respectfully requested. Should the Examiner not be of the opinion that this case is in condition for allowance, it is requested that this amendment be entered for the purposes of appeal.

Serial No. 10/758,079

Should any points remain in issue, which the Examiner feels could best be resolved by either a personal or a telephone interview, it is urged that Applicant's local attorney be contacted at the exchange listed below.

Respectfully submitted,

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